REMARKS

Entry of this amendment and reconsideration of this application, as amended, are respectfully requested.

The indication of allowable subject matter is gratefully acknowledged.

It is believed that the amendments to the claims overcome the rejection of claims under §112, second paragraph.

Claims 22-24, 27, 37-39 and 41 were rejected under 35 U.S.C. §103(a) over Erbkamm and Muraoka. Claims 25-26, 28-29, 30 and 40 were rejected under the same statute over Erbkamm, Muraoka and Schwindt. Applicants respectfully traverse each of these rejections.

Muraoka is cited for allegedly disclosing the mounting of rollers on the top of a running-length-work installation. In items 17 and 18 of the office action, the Examiner admits that Erbkamm does not disclose that the coating roller and at least one guide roller are attached directly to the top of the installation. Moreover, the Examiner alleges that Muraoka discloses that it is known in the art to mount roller devices of a running-length-work coating installation to a top of the installation (e.g. Fig. 3), in a fashion equivalent to when they are mounted to a side or bottom thereof without modifying the operation of the installation. The Examiner concludes, therefore, that it would have been obvious to have substituted equivalent top mounted guide and/or coating rollers in Erbkamm without modifying the operation of the installation, as allegedly demonstrated in Muraoka.

The subject matter of present claim 22 provides a strip coating installation in which ends of a coating roller and at least one guide roller facing towards a detachable side wall are attached by supporting elements and bearings directly to the top of the vacuum chamber and wherein a space beneath the coating roller is free of supporting elements. Hence, the rollers are individually

securely supported on their ends by the top wall of the chamber, the top wall being externally exposed to atmospheric pressure and internally to vacuum pressure, without causing deformations. Moreover, the space beneath the coating roller is available for positioning coating devices. A coating vacuum chamber is, thereby, provided which has a high structural integrity and avoids having parts of the apparatus touch each other or touch the strip to be coated. Furthermore, since the supporting elements of the rollers are positioned at the ends of the rollers, i.e. laterally, a minimum number of moving parts causing abrasion and debris particles is positioned above the coating cylinder.

Erbkamm is directed to a vacuum web coating system having a process roller mill 14 including cooling rolls 15 and 16, paragraph [0024] for coating. The process roller mill 14 is positioned at second and third fastening points 19 and 20 located at fastening walls 9 and 10, respectively (paragraphs [0024] and [0025]). According to Fig. 1, the fastening points 19 and 20 are plates which are horizontally mounted at the fastening walls 9 and 10. The fastening walls 9 and 10 are dividing walls of the process chamber 1 and the reel chambers 2 and 3, respectively. As stated in paragraphs [0006] and [0009], the object to be solved by Erbkamm is to increase the precision in terms of the parallelism of all the rolls used in the system. This is achieved by avoiding deformations at least in the region of the fastening points during the required evacuation of the chambers. Consequently, deviations from the adjustment of the roller mills carried out under atmospheric pressure are avoided. Erbkamm's object is solved by fastening the process roller mill 14 not at external walls of the coating system, which are pressurized by the external/internal pressure difference when the coating system is evacuated, but at the fastening walls 9 and 10, which are not pressurized during evacuation. Hence, Erbkamm leads the skilled person away from the subject matter of claim 22 of the present application

In addition, according to Erbkamm, the fastening structure of the cooling rolls results in that the two cooling rolls 15 and 16 are not supported individually. Hence, their total load has to be supported at the same fastening points, and this would promote deformations if the cooling rolls were supported at pressurized external walls. Therefore, according to Erbkamm, the supports of the rolls must not be attached to pressurized external chamber walls.

In contrast to Erbkamm, according to claim 22 of the present application, ends of the at least one guide roller and of the coating roller that face toward the removable closing plate are individually attached by supporting elements and bearings directly to the top external wall of the vacuum chamber, without causing deformations. As a result, Erbkamm teaches away from the subject matter defined in present claim 22.

Referring now back to Muraoka, this reference discloses a method and an apparatus for manufacturing a film. As shown in Fig. 3 and in column 4, lines 41 to 64 of Muraoka, a delivery roller 100 extends through a support 102 attached to the top wall of the housing of the apparatus. However, the intermediate roller 200 is not attached to the top wall.

Moreover, Fig. 3 clearly shows that the delivery roller 100 is not only supported by the top of the chamber, but extends though the side wall and is, hence, also supported by the side wall. Furthermore, the fixations of delivery roller 100 and intermediate roller 200 are all positioned at just one side wall of the housing. In addition, no side wall of the housing is removable from the chamber. Furthermore, Muraoka shows in, e.g., Fig. 3, several rolls positioned one upon the other, but only one roller, namely roller 100 in Fig. 3 is fixed at a side wall as well as on the top wall of the housing. There is no hint or suggestion as to which way the rollers, e.g. 100, 130, and 200 of Fig. 2, are fixed in the chamber. The support of the remaining rollers is not disclosed in any way, as to whether they are fixed in one common support and

wherein the chamber it is fixed (column 4, lines 65 to 67 of Muraoka). Furthermore, as disclosed in Fig. 2, the coating device of Muraoka is not positioned below the coating drum 200 but lateral to it. In other words, Muraoka does not need to keep the space below the coating drum free of any installations, and, according to Muraoka, it is possible to attach the support of the rollers except roller 100 to the bottom part of the chamber. Hence, a skilled artisan is not provided with any motivation in view of Muraoka to keep the space below the coating cylinder free of supporting elements and to have a minimum number of moving parts above the coating cylinder. Consequently, Muraoka teaches away from the subject matter claimed in present claim 22.

As a result, a skilled artisan would not be led to the present invention by either Erbkamm or Muraoka for solving the problem and achieving above mentioned benefits of the present application.

In addition, according to Muraoka, the side wall of the chamber housing is not removable from the chamber, contrary to Erbkamm. Moreover, the rollers of Muraoka are fixed at pressurized external walls of the housing of the apparatus, which has definitely to be avoided according to Erbkamm. Consequently, the skilled artisan, i.e., a vacuum technology expert, would not combine Erbkamm and Muraoka.

Furthermore, even if the roller support of Muraoka was installed in the coating system of Erbkamm, a structure would result wherein the rollers of Erbkamm would be supported not only by the topwall, but also by the sidewall (Fig. 3 of Muraoka). Hence, the sidewall would not be detachable any longer. This is in contrast to the subject matter of claim 22 of the present application, in which "ends of the at least one guide roller and of the coating roller that face toward the removable closing plate are attached by supporting elements and bearings directly to

the top". Consequently, a combination of Erbkamm and Muraoka would not result in the subject matter of claim 22.

Finally, according to Erbkamm, the rollers are supported at non-pressurized walls, thereby preventing deformations at least in the region of the fastening points during evacuation of the chambers and, consequently, preventing deviations from the adjustment of the roller mills carried out under atmospheric pressure. In contrast, the rollers of Muraoka are supported at pressurized external walls of the housing of the apparatus. Hence, the supports of Erbkamm and Muraoka are not equivalent components and, therefore, cannot be substituted for one another.

Additionally, mounting the roller support of Muraoka in the installation disclosed in Erbkamm would have an effect on the operation thereof, since in this case deformations in the region of the fastening points during evacuation of the chambers and deviations from the adjustment of the roller mills carried out under atmospheric pressure could no longer be avoided.

Finally, according to Erbkamm, all pivot shafts of the rollers are supported on both sides in contrast to Muraoka who discloses a cantilevered type of roller fixation. Combining both types means that one has to decide in favor of one of the disclosed systems.

In view of the foregoing, these rejections should be withdrawn. Allowance is respectfully requested.

The Commissioner is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in

this application by this firm) to our Deposit Account No. 50-0624, under Order No. NY-HANZ-206-US. A duplicate copy of this paper is enclosed.

Respectfully submitted

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